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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/808,224

03/23/2004

Cherng Linn Teo

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EXAMINER

MORRISON, THOMAS A

ART UNIT

PAPER NUMBER

3653

MAIL DATE

DELIVERY MODE

05/18/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	Application No.	Applicant(s)	
	10/808,224	TEO ET AL.	
	Examiner	Art Unit	
	Thomas A. Morrison	3653	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 21 February 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 18-22 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 18-22 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 February 2007 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## DETAILED ACTION

### *Claim Objections*

1. Claim 18 is objected to because of the following informalities: (1) "out-put roller assembly" in line 11 of claim 18 should be -- output-roller assembly --.

Appropriate correction is required.

### *Claim Rejections - 35 USC § 103*

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 18 and 20-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,042,791 (Stemmle) in view of U.S. Patent No. 5,559,606 (Webster et al).

Regarding claim 18, Figs. 1-8 of Stemmle show a printer comprising:

a printhead (including 30 and/or 18) for printing a media sheet;

a front duplex module comprising: (i) a media path entry (near 28) where a media sheet to be printed can enter; (ii) a linefeed-roller assembly (including 27) configured to transport the media sheet entering the media path entry (near 28) toward the printhead (including 30 and/or 18) to enable printing on a first side of the media sheet; (iii) an output-roller assembly (including 33) configured to advance the media sheet in a forward direction or to reverse the media sheet in a reverse direction, wherein a simplex media path is defined between the linefeed-roller assembly (including 27) and the

output-roller assembly (including 33), and the printhead (including 30 and/or 18) is positioned downstream from the linefeed-roller assembly (including 27) along the simplex media path but upstream from the out-put roller assembly (including 33); and

a back duplex module (including 40) detachably coupled to the front duplex module, the back duplex module (including 40) being configured to provide a loop path (Figs. 4B-5B) for flipping the media sheet one time to thereby enable printing on a second side of the media sheet, wherein the loop path (Figs. 4B-5B) has an entry portion (below 42 in Fig. 1) for receiving the media sheet from the front duplex module and an exit portion (below 88) that is aligned to the simplex media path, and wherein the front duplex module and the back duplex module (including 40) are configured to provide a duplex media path (from 39 to 42 and into 40 and then out of 40 into 88 and back up to a location below 28) that includes the loop path (Figs. 4B-5B), and a duplex path entry (at 39 in Fig. 1) that is positioned adjacent to the output-roller assembly (including 33) but downstream from the printhead (including 30 and/or 18) so as to enable a trailing edge of the media sheet to enter the duplex media path. The printhead (i.e., area where ink is applied (including 30 and/or 18)) is positioned downstream from the linefeed-roller assembly (including 27) along the simplex media path but upstream from the out-put roller assembly (including 33). Also, the loop path, as best shown in Fig. 4B, flips the sheet one time along a U-shaped path. The back duplex module (including 40) is detachably coupled to the front duplex module. For example, Figs. 7 and 8 show different modules that can be connected to the bottom of the Stemmler printing device. The Stemmler patent discloses most of the elements of claim 18, but

does not specifically disclose an ink jet printer. Stemmler discloses one embodiment that is an electrostatographic printer, but also suggests that the teachings of Stemmler are equally applicable to a wide variety of other types of printers. See e.g., column 5, lines 15-23 of Stemmler.

Moreover, the Webster et al. patent discloses that it is well known in the art to substitute an ink jet printhead for the electrostatographic aspects of an electrostatographic printer as an art known equivalent for creating images. See e.g., Fig. 1 and column 4, line 66 to column 5, line 4. It would have been obvious to one of ordinary skill in the art at the time the invention was made to replace the electrostatographic aspects of the Stemmler device with an ink jet device printhead, because this merely replaces one well known printing device with another well known printing device that performs essentially the same function as an art known equivalent, as suggested by column 4, line 66 to column 5, line 4 of Webster et al. Substituting the electrostatographic aspects of the Stemmler device with an ink jet printhead will result in the Stemmler printing device being an ink jet printer with an ink jet head. Thus, Stemmler in view of Webster et al. meets all of the limitations of claim 18.

Regarding claim 20, Figs 1-8 of Stemmler show that the back duplex module (including 40) comprises a duplex roller (65) arranged to advance the media sheet along the loop path (Figs. 4B-5B) toward the linefeed-roller assembly (including 27). See e.g., Fig. 5C for return of sheet by duplex roller 65 back up to area near the linefeed-roller assembly (including 27).

Regarding claim 21, Fig. 5C shows that the back duplex module (including 40) comprises two duplex rollers (65 and 63) arranged to advance the media sheet along the loop path toward the linefeed-roller assembly (including 27).

Regarding claim 22, Fig. 1 shows that the front duplex module further comprises a pair of transfer rollers (42) arranged along the duplex media path (from 39 to 42 and into 40 and then out of 40 into 88 and back up to a location below 28) to advance the media sheet along the duplex media path.

3. Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,042,791 (Stemmle) in view of U.S. Patent No. 5,559,606 (Webster et al) as applied to claim 18 above, and further in view of U.S. Patent No. 5,988,906 (Arcaro et al.). Stemmle in view of Webster et al. discloses all of the limitations of claim 19, except for the linefeed-roller assembly and the output-roller assembly being coupled to each other to provide a coordinated control for handling the media sheet.

The Arcaro et al. patent discloses that it is well known to couple multiple rollers together via a gear plate 97 so that a single motor 95 can be used to drive all of such rollers as an efficient and cost effective roller driving system. See e.g., Fig. 2 and column 3, lines 32-39 of Arcaro et al. It would have been obvious to one of ordinary skill in the art at the time the invention was made to couple the linefeed-roller assembly (including 27) and the output-roller assembly (including 33) of Stemmle to each other in order to allow a single motor to be used to drive the linefeed-roller assembly and the output-roller assembly as an efficient and cost-effective roller driving system, as

suggested by Fig. 2 and column 3, lines 32-39 of Arcaro et al. Thus, Stemmler in view of Webster et al. and Arcaro et al. meets all of the limitations of claim 19.

### ***Response to Arguments***

4. Applicant's arguments with respect to claim 18 have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

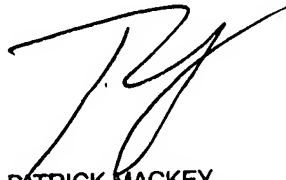
A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thomas A. Morrison whose telephone number is (571) 272-7221. The examiner can normally be reached on M-F, 8am - 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick Mackey can be reached on (571) 272-6916. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

05/12/2007



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